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# Social Support and Sense of Loneliness in Solitary Older Adults

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**Abstract.** Older people are vulnerable to loneliness and isolation. Solitary seniors are more likely to suffer the feelings of loneliness with inadequate social networks. Based on a face-to-face questionnaire survey with 151 community-dwelling solitary seniors, the present study examined the associations between social support and the sense of loneliness among solitary older adults in Hong Kong. The results showed that poor mental health status, financial inadequacy and weak social support networks were significantly associated with the sense of loneliness of solitary older adults, with social support being the most prominent risk factor. Frequent contacts with siblings, relatives or friends were found to be important sources of social support to combat loneliness. Policy and service implications are discussed.

**Keywords:** loneliness, social support, Hong Kong, solitary older Chinese

## 1 Introduction

Population is aging rapidly in Hong Kong. It is estimated that every three people in Hong Kong will be 65 years or above by the year of 2040 [1]. Notably, the percentage of older adults living alone has increased from 11% to 13% in the past decade [2]. A rising trend of living alone among older adults is observed due to late marriage, the declining fertility rate and the lengthening of life expectancy [3, 4].

Loneliness refers to feelings of depression and anxiety about being left alone [5], which is one of the most common and distressing problems facing older adults [3]. Older people may have a higher chance of inadequate social networking or access to close relationships [6] if they are living alone. Although previous research pointed out that various forms of social support may buffer the negativities of loneliness [3], little is known about the relationship between social support and loneliness in older people

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living alone. Therefore, it is the aim of the present study to examine health and social support associated with solitary older adults' sense of loneliness to inform future service and programme development.

## 2 Method

Ethical approval of the present study was obtained from the first author's affiliated institution. A purposive sampling strategy was used for recruiting eligible participants. Inclusion criteria were: 1) aged 65 years and over, 2) Hong Kong permanent residents, 3) living alone without other persons living under the same roof, and 4) cognitively capable of answering survey questions. A total of 151 participants participated in the study and completed the survey ( $N = 151$ ).

Data was collected between January and March 2015. Five undergraduate students with educational backgrounds in aging studies and good communication skills with older people conducted the interviews. Training and supervision were provided during the course of data collection. Forty-four pilot interviews were conducted to ensure the clarity and relevance of the measures in the questionnaire. Each interview lasted approximately 30 minutes.

### 2.1 Measurements

Background information of respondents were collected which included: gender (male or female), age (65 or above), educational attainment (uneducated, primary, secondary, tertiary or university level), place of birth and number of years living in Hong Kong. Their self-rated financial situations were classified as very inadequate, inadequate, merely adequate, adequate and more than adequate.

The Chinese version of the seven-item Lawton Instrumental Activities of Daily Living (IADL) was adopted to measure *functional health* of older adults [7]. Scores range from seven to twenty-eight, with higher scores indicating a greater ability to perform daily activities independently. The Cronbach's alpha coefficient of IADL in the present study was .74, which is satisfactory. Respondents' *mental health status* was measured by the Chinese Mental Health Inventory (MHI-5) which was widely used to measure mental health problems such as anxiety and general distress [8]. Total scores range from five to thirty, with higher scores indicating better mental health. In the present study, the reliability of MHI-5 was satisfactory as indicated by Cronbach's alpha value which equaled to .79. *Social support network* was assessed by the Chinese version of 10-item Lubben's Social Network Scale (LSNS) (alpha = .70). This scale has been widely used in examining social networks of older people [9, 10]. A higher rating on this scale represents a stronger social support network. A satisfactory reliability level of Cronbach's alpha in the present study was reported as 0.77.

Respondents' *most frequently contacted person* was included in the analysis since it may represent the main source of informal support for solitary older adults. Respondents were asked to elucidate their most frequently contacted person. It could be their 'offspring', 'sibling or relatives', or 'friend'. These responses were coded as 0 = 'no' and 1 = 'yes'. Respondents' *sense of loneliness* was rated by an 8-item Chinese

Version of Loneliness Scale ( $\alpha = .73$ ) [11]. A 5-point Likert scale was adopted ranging from '1 = strongly disagree' to '5 = strongly agree'. Total scores range from five to forty, with higher scores indicating greater feelings of loneliness. In the present study, the Cronbach's alpha of the loneliness scale was .88, representing a satisfactory reliability level.

## 2.2 Data analysis

SPSS version 21.0 was used in data analysis. Descriptive statistics were first performed to describe the socio-demographic characteristics of this sample. Then, multicollinearity of included independent variables was checked, with *variance inflation factor* (VIF) calculated for independent variables. All the VIF values were below 10, indicating no multicollinearity issue. Finally, a series of hierarchical regression analyses were performed to unearth the relative contribution of demographic characteristics, health status and social support factors to solitary seniors' sense of loneliness.

## 3 Results

Hierarchical multiple regressions were employed to understand the correlates of loneliness. Social demographic characteristics including age, gender, education level and financial status were entered as Block 1. Self-perceived health, functional health and mental health were entered as Block 2. The strength of social support, dummies of the most frequently contacted persons (children, sibling and friends) were entered as Block 3. The three blocks of variables significantly increased explained variance of loneliness by 16%, 10%, and 17% respectively. Accumulatively, these three blocks of variables accounted for 43% of the variance in the sense of loneliness. It was found that older persons' feeling of loneliness was significantly associated with whether they were born in Hong Kong, length of residence in Hong Kong, mental health, social support networks and most frequent contact with kinships and friends.

The final model showed that reduced loneliness was most strongly associated with social support networks ( $\beta = -.39, p < .001$ ), sibling and other relatives being the most frequently contacted person ( $\beta = -.26, p < .05$ ), children ( $\beta = -.24, p < .05$ ) and friends ( $\beta = -.21, p < .05$ ) after controlling age, gender, educational level, perceived financial adequacy, indigenous or not, length of stay in Hong Kong, mental health and functional health.

## 4 Discussion

The present study showed that after controlling for socio-demographic factors and health status, the strength of social support networks could predict the sense of loneliness among solitary older Chinese in Hong Kong. Consistent with previous research [3, 12, 13], the significant role played by social support in reducing feelings of loneliness was confirmed with a sample of Chinese older people living alone. The findings of present study further revealed that solitary older people with siblings, other relatives and friends as their most frequent contacts were less likely to feel lonely than

those whose adult child(ren) were reported to be most frequently contacted person(s). A possible explanation is that peer support from persons who may have similar experiences will enable better exploration of feelings and make people feel genuinely understood, thus combating the feelings of loneliness. Additionally, compared with indigenous Hong Kong people, those solitary older people who were not locally born were found to be more vulnerable to the feelings of loneliness. It is understandable that immigrants are more likely to be separated from relatives, have narrower social networks which are mostly ethnically bounded, and may encounter more barriers in building supportive and emotionally satisfying social networks.

Programmes and social services should be developed to strengthen solitary older adults' social support networks to reduce their feelings of loneliness in later life. Public education should be strengthened to raise awareness about the importance of enhancing social support for solitary older adults. Practitioners and service providers should be trained to be aware of the problems facing solitary older adults, a special group of people who are less likely to establish close, intimate ties with kinships or peers due to their living arrangement. Tailored programmes aimed at enhancing their abilities in using internet or mobile phones to maintain social contacts could be implemented among community dwelling seniors, especially for those who are living alone. Communications with families and friends either face to face or via technology could largely alleviate their feelings of loneliness [14]. Advancements in social media technologies and other digital platforms have huge potential benefits for older adults to build up relationships with peers and keep in touch with the larger society and community [15].

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